

**DT09 Rec'd PCT/PTO 21 DEC 2004**

# ABSTRACT OF THE DISCLOSURE

A system for sensing at least one characteristic parameter of a tyre fitted to a vehicle includes a movable unit and a fixed unit. The movable unit is combined with the tyre and includes a device for sensing the at least one characteristic parameter, a device for transmitting a signal out of the tyre that relates to the at least one characteristic parameter, and a device for generating electrical energy. The fixed unit is combined with the vehicle and includes a device for receiving signals from the movable unit. The electrical energy generating device is capable of supplying electrical energy to the sensing device and to the transmitting device. The electrical energy generating device includes a capacitor that charges itself with electrical energy in response to mechanical stresses applied to the tyre. The movable unit and a vehicle wheel are also disclosed.